

# Discussion of Capital Flows and Exchange Rates: A Quantitative Assessment of the Dilemma Hypothesis

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! *financial channel outweighs expenditure switching*

Empirical question: role for exchange rate regime with GFC?

Policy question: What are optimal policies for dealing with GFC?

# Approach

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  - Financial frictions - amplification of shock (bank lending)
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2. Theoretical: Two-country model, estimated to match model IRFs to Panel VAR
  - Financial frictions - amplification of shock (bank lending)
  - Trade frictions (LCP exports) needed to match inflation and export response (limited ERPT)
3. Quantitative: Counterfactual exercises
  - Exchange rate regime?
  - Countercyclical tax on domestic credit (financial stability)?
  - Countercyclical tax on foreign borrowing (capital flows management)?

# Main Findings

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2. Model: The trade and financial frictions important to match empirical response to GFC
3. Policy experiments:
  - Peg increases macroeconomic volatility (interest rate resp.)
  - Financial stability tool and capital flow measure both reduce real GDP and credit spread...**CC tax domestic credit most effective reducing volatility.**
  - Peg together with policy instruments approximates response real GDP to GFC with flexible exchange rate regime...**Inflation response higher.**

# Key Contribution

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## **Relevant quantitative framework   realistic features:**

Financial frictions generate time-varying UIP wedge and depend on degree of foreign currency borrowing.  
Dominant role for US Dollar in finance and trade.

**An important step in the direction of understanding optimal policy responses to GFCs.**

# Discussion

Important paper, a rich model and a lot of insights

Well-written, clear exposition, role frictions very clear

Precision of empirical estimates: Comment #1 & 2

Heterogeneity in literature: Comment #3

Financial frictions: Comment #4

# # 1 & 2 Global Factors & Trends

Current measure of GFC is US Monetary Policy...



# # 1 & 2 Global Factors & Trends

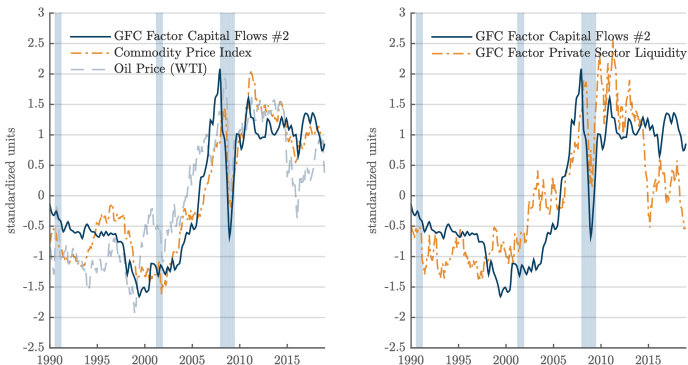
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Other important factors

1. Global Commodity & Trade Cycle (2<sup>nd</sup> global factor) (e.g., Miranda-Agrippino & Rey 2021, Degasperi, Hong & Ricco 2021)
2. Macroprudential policy after financial crisis (e.g., Bergant, et al. 2023, Neanidis 2019)

# # 1: Global Factors & Trends

FIGURE 5: CAPITAL FLOWS, PRIVATE LIQUIDITY AND COMMODITY CYCLES



*Notes:* [Left Panel] Second global factor in capital flows (all directions, all types, solid line), commodity price index (dash-dotted line), oil price (dashed line). [Right Panel] Second global factor in capital flows (all directions, all types, solid line), global factor in world private liquidity (dash-dotted line).

source: Miranda-Agripino & Rey (2021)

# # 1: Global Factors & Trends

Why is this point important?

Quantitatively important: Two factors    one-third to one-half of variance gross flows (Miranda-Agrippino & Rey 2021, Davis et al. 2021, among others)

Particularly relevant for private sec. liquidity (Miranda-Agrippino & Rey 2021)

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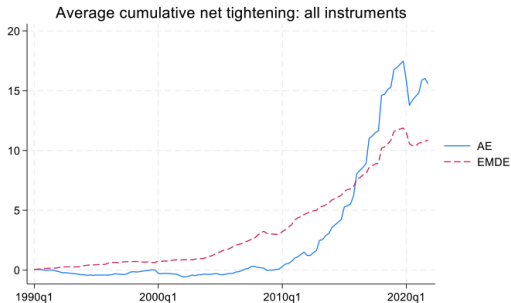
Empirical analysis should control for this second factor

Suggestion:

Follow literature dynamic factor models (DFMs). Factor one (GFC) in place of US monetary policy and factor two as a control.

## # 2: Global Factors & Trends

### The role of macroprudential policy?



Source: based on data from the IMF integrated Macroprudential Policy (iMaPP) database, described in Alam et al. (2024).

(Davenport, Sà, and Wieladek, 2024)

## # 2: Global Factors & Trends

Why is this important?

Empirical estimates + model to analyse effects of macro-prudential and capital flow measures

Evidence of macroprudential policies reducing effect of foreign shocks (Bergant et al. 2023, Neanidis 2019, and reviewed in Davenport, Sá, Wieladek 2024).

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Suggestion:

Control for macroprudential developments (shocks)

One approach estimates macroprudential reaction function, collect residuals (Ahnert et al. 2021, Gelos et al. 2022).

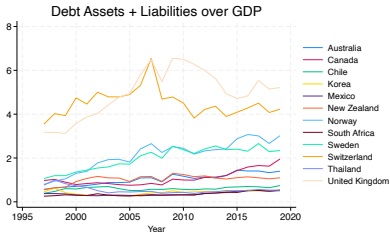
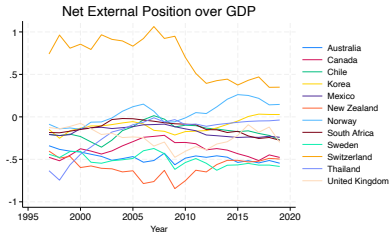
## # 3: Heterogeneity

Important dimensions of heterogeneity from the literature:

1. GFC more important for net debtors & countries larger positions in debt instruments  
(Davis et al. 2021)
2. Driven by debt assets & liabilities (important role for banks)



# # 3: Heterogeneity



Average debt assets and liability ratio 1.4  
(Davis et al. 2021 sample)

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Suggestion:

Report mean-group (Pesaran & Smith 1995), but explore heterogeneity across countries in larger sample, or by groups

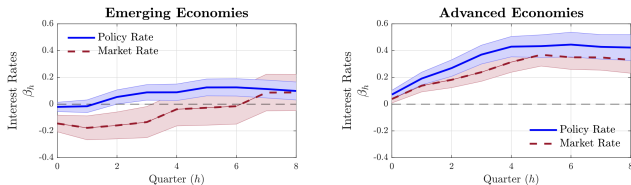
Relevant dimensions: debtors versus creditors (Davis et al., 2021), advanced versus emerging (e.g., de Leo et al. 2022), foreign currency bank borrowing (see comment # 4, de Leo, et al. 2022), Share dollar invoicing in trade (Boz et al. 2022)

## # 4 Financial Frictions

Financial frictions important for amplification of shock  
Focus on home banks (why foreign banks frictions?)  
Tightness of financial friction  $\theta$   
Penalty for foreign currency borrowing  $\gamma$   
Generate a time-varying wedge in UIP condition

# # 4 Financial Frictions

## Monetary policy response to US tightening



(a) Policy Rates and Market Rates

source: de Leo et al. 2022

Coefficients regression of interest rates on GDP growth at different horizons

Disconnect between policy and market short rates (EMEs)

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Suggestions:

Share of optimal proportion of foreign currency debt  $x$  estimated 0.154 (implies  $\rho$ ,  $\sigma$  jointly)

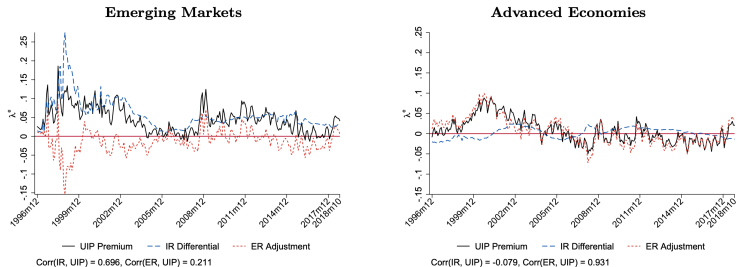
Discipline with data, share of external liabilities of the domestic banking sector is around 35% (emerging economies reporting to the BIS). (Hahm et al. 2013; Avdjiev et al. 2022)

How does impact of GFC (credit spreads) vary with  $\rho$  ?

Policy experiment limit share of foreign currency borrowing

# # 4 Financial Frictions

How does the wedge vary over time?



B) INTEREST RATE DIFFERENTIAL AND EXCHANGE RATE ADJUSTMENT TERMS

Figure 1: UIP PREMIUM IN ADVANCED ECONOMIES AND EMERGING MARKETS

source: Kalemli-Özcan & Varela (2021)

UIP premium emerging markets (risk factors) versus advanced economics (deviations from FIRE).



## Summary

Great paper! Cleanly executed and very insightful  
Learned a lot about frictions in GFC transmission  
Quantitative assessment confirms GFC & limits to insulation of flexible exchange rate (Dilemma Rey, 2015)  
Macroprudential policies are not enough to limit inflation output tradeoff in fixed exchange rate regime.  
Policies limiting domestic credit growth seem to perform best in reducing macro-volatility  
Future work could emphasise:  
    Sharpening empirical estimates by controlling important confounding factors  
    Exploring important heterogeneity, particularly foreign currency borrowing and role for GFC transmission and time varying UIP wedge.

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